भारतीय मानक **IS 7155 (Part 7) : 2023**

Indian Standard

वाहक सुरक्षा हेतु अनुशंसित रीति संहिता

भाग 7 निरीक्षण और रखरखाव

(दूसरा पुनरीक्षण)

Code of Recommended Practice for Conveyor Safety

Part 7 Inspection and Maintenance

(Second Revision)

ICS 53.040.10

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BUREAU OF INDIAN STANDARDS
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Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional Committee, MED 06

FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards on recommendation of the Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional Committee, had been approved by the Mechanical Engineering Divisional Council.

This Indian Standard (Part 7) first published in 1974 and subsequently revised in 1990. It covers the recommended practice to be adopted in the safe use of conveyors and conveying machinery used for transportation of bulk materials or unit loads.

This revision has been taken up to keep pace with the latest technological developments. In this revision, the standard has been brought into latest style and format of Indian Standards, and references to Indian Standards, wherever applicable have been updated.

The code of recommended practice for conveyor safety is in eight parts. This standard (Part 7) covers the inspection and maintenance of the conveyors. Other parts in this series under the general title are as follows:

Part 1 General information
Part 2 General safety requirements
Part 3 Belt conveyors and feeders
Part 4 Vibrating conveyor/feeder
Part 5 Apron conveyors/apron feeders
Part 6 Selection, training and supervision of operators
Part 8 Flight conveyors

The composition of the committee responsible for the formulation of this standard is listed in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

CODE OF RECOMMENDED PRACTICE FOR CONVEYOR SAFETY

PART 7 INSPECTION AND MAINTENANCE

(Second Revision)

1 SCOPE

This standard (Part 7) covers specific requirements of inspection and maintenance for conveyor safety. These requirements are in addition to the information and general safety requirements given in IS 7155 (Part 1) and IS 7155 (Part 2) respectively.

2 REFERENCES

The standards listed below, contain provisions which, through their reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below.

IS No.	*Title*
IS 7155	Code of recommended practice for conveyor safety:
(Part 1) : 1986	General information (*first revision*)
(Part 2) : 1986	General safety requirements (*first revision*)

3 SPECIFIC SAFETY REQUIREMENTS

3.1 Besides statutory and other requirements relating to inspection and maintenance of conveyor system, specific safety requirements relating to these aspects shall be observed particularly at the utilization stage.

3.2 Inspection and Maintenance Programme

An inspection and maintenance programme shall be planned, organized and implemented to keep the entire conveyor system in a safe operating condition.

3.2.1 The inspection and maintenance programme shall include the various checks to be made, time schedule and the responsibility of personnel at various levels to implement the programme.

3.3 Regular Checks

Those responsible for inspection and maintenance shall be thoroughly familiar with the recommendations made by the conveyor manufacturer and the inspection and maintenance programme (*see* **3.1**).

3.3.1 Among other checks all take up devices provided for the purpose of adjusting for stretch in the belt, chain or cable shall be checked for proper functioning periodically as per the time schedule decided in the inspection and maintenance programme (*see* **3.2.1**).

3.3.2 All other pins, fasteners and couplings shall be checked periodically and carefully in accordance with the inspection and maintenance programme (*see* **3.2**).

3.3.3 Regular inspections shall be made and details recorded for future reference.

3.4 Spare Parts

Depending upon the wear and other characteristics adequate spare parts shall be maintained for ready replacement.

3.5 Lubrication

Inadequate or improper lubrication may lead to increased breakdown of the system/subsystem/component thus causing safety hazard. Particular attention shall be paid to lubrication schedules recommended by the manufacturer of conveyor and to the replacement of worn parts before they fail. The lubricant shall be of the type, grade, etc, as recommended by the machine manufacturer.

3.6 Removal of Guards

Where inspection or maintenance work entails the removal of guards, power shall be disconnected from the conveyor whilst this is being carried out and the control shall be locked in the ‘off’ position and an appropriate warning sign shall be secured to the controls. It shall be ensured that guards are replaced on the completion of inspection and maintenance work.

3.6.1 It is recommended that a ‘danger’ and ‘out of control’ tag system be evolved.

3.6.1.1 Under normal circumstances when a person has tagged or locked out a control then it shall be the responsibility of that person to remove the tag and to reset the control after the purpose for which these were used was accomplished.

3.7 Safety of Personnel

Where inspection and maintenance personnel are required to work in situations where there is a risk of falling, consideration shall be given to the use of safety belts and harness assemblies.

ANNEX A
(*Foreword*)

COMMITTEE COMPOSITION

Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional Committee, MED 06

Organization	*Representative(s)*
Rites Limited, Gurugram	SHRI D. MAJUMDAR (***Chairperson***)
CSIR — Central Institute for Mining and Fuel Research, Dhanbad	SHRI DEBASHISH BASAK SHRI GIRENDRA M. PRASAD (*Alternate*)
Conveyor and Ropeway Services Private Limited, Kolkata	SHRI S. SHEKHAR CHKRAVARTY SHRI KAMAL KUMAR BOSE (*Alternate*)
Damodar Ropeways & Infra Limited, Kolkata	SHRI D. L. DAS
Directorate General Factory Advice Service and Labour Institutes, Mumbai	SHRI G. P. NIJALINGAPPA SHRI H. M. BHANDARI (*Alternate*)
Directorate General of Mines Safety, Dhanbad	SHRI D. B. NAYAK SHRI VIJAY YADAORAO BARAPATRE (*Alternate*)
Durgapur Steel Plant, Sail Durgapur	SHRI SANJAY KUMAR SHRI DEEPAK BISWAL (*Alternate*)
Indian Association of Amusement Parks and Industries, Mumbai	SHRI PRADEEP SHARMA SHRI ANIL PADWAL (*Alternate*)
Lepton Projects Private Limited, Ghaziabad	SHRI SANJAY KUMAR SHRI PIYUSH RATHI (*Alternate*)
Mecon Limited, Ranchi	SHRI SANJOY BHATTACHAR SHRI AMIT PAL (*Alternate*)
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Ntpc Limited, New Delhi	SHRI O. P. KALIA
National Mineral Development Corporation, Hyderabad	SHRI ALOK KUMAR MEHTA SHRI S. SURENDER (*Alternate*)
Phoenix Conveyor Belt India Private Limited, Kolkata	SHRI RAJEEV SHARMA SHRI ASOKE KUM GHOSH (*Alternate*)
Project and Development India Limited, Noida	SHRI NARENDRA SINGH
Rites Limited, Gurugram	SHRI DINESH KUMAR
Ropeway and Resorts Private Limited, Kolkata	SHRI BIPLAB DAS SHRI SUDIPTA KRISHANA (*Alternate*)
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Usha Breco Limited, Ghaziabad	SHRI MANOJ PANWAR SHRI SANJEEV DHARIWAL (*Alternate*)
Usha Martin Limited, Ranchi	SHRI SUBRATA DUTTA SHRI SANDEEP JAISWAL (*Alternate*)
In Personal Capacity (*BH/V1/SF,VIP Floors Sector 81, DPS Faridabad,- 121007*)	SHRI ASHUTOSH BHADRA
In Personal Capacity (*F-7B DDA MIG Flats, Hari Nagar, New Delhi - 110006*)	SHRI S. C. GANDHI

Organization	*Representative(s)*
In Personal Capacity (*20 D, Dhakuria Station Road, Kolkata - 700031*)	SHRI RANJAN MUKHERJEE
BIS Directorate General	SHRI RAJNEESH KHOSLA, SCIENTIST 'F'/SENIOR DIRECTOR AND HEAD (MECHANICAL ENGINEERING) [REPRESENTING DIRECTOR GENERAL (*Ex-officio*)]

Member Secretary
SHRI AMAN DHANAWAT
SCIENTIST 'B'/ASSISTANT DIRECTOR
(MECHANICAL ENGINEERING), BIS

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Amend No.	Date of Issue	Text Affected

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